



B.S. Abdur Rahman™

Crescent

Institute of Science & Technology

Deemed to be University u/s 3 of the UGC Act, 1956



YEARS OF
ACADEMIC
EXCELLENCE



DEPARTMENT OF ELECTRICAL
AND
ELECTRONICS ENGINEERING

Minor Degree in Electric Vehicles

Admissions Open
2024-25



The Department of Electrical and Electronics Engineering was established in the year 1984. The Electrical and Electronics Engineering programme is accredited by NBA. The major degree programmes offered by the department are

- o **B.Tech. (Electrical and Electronics Engineering)**
- o **M.Tech. (Power Systems Engineering)**
- o **Ph.D. (Part time / Full Time)**

The Department has well qualified faculty members with specializations in Power System, Electric Machines, Power Electronics, Control System, Applied Electronics, Embedded Systems, Bio Medical Instrumentation.

The Department is equipped with the state of art laboratories such as Electric Circuits and Electronic Devices Lab, Electrical Machines Lab, Power System Simulation Lab, Power Electronics Lab, Industrial Automation Lab, PCB Fabrication plant, Control Systems Lab, Measurements & Instrumentation Lab, Mini High Voltage Lab and Special Machines Lab.

Most automobile companies have decided to switch to electric vehicles, a cleaner and sustainable alternative. Due to migration of automobile sector towards electric and hybrid vehicles, the industry is facing a shortage of talented and skilled engineers with knowledge in e-mobility. To fill the gap, the Department of Electrical and Electronics Engineering is offering minor degree programme on "Electric Vehicles" (EV) for other Engineering branch students.

OBJECTIVES OF THE MINOR DEGREE PROGRAMME

- To impart skills in electric vehicle and hybrid electric vehicle technology for the future e-mobility services
- To inculcate knowledge in battery management system and effective fast charging systems
- To provide knowledge on various electric motor drives and controllers for high efficient and low cost e-vehicles

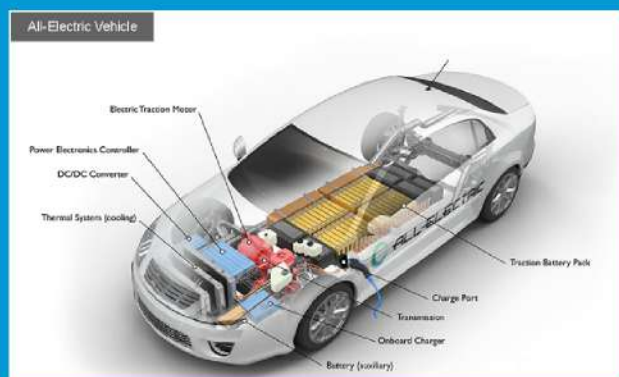
FEATURES OF EV CURRICULUM

The programme will focus on the following:

- Fundamentals of Electric and Hybrid Vehicles
- Energy Devices for Electric Vehicles
- Electrical & Electronics for Automotive System
- Automotive Transmission & Communication
- HEV/xEV Motor Drives and Controllers
- Electric Mobility Laboratory
- Mini Project

ELIGIBLE DEPARTMENTS

- Artificial Intelligence and Data Science
- Computer Science & Engineering (Cyber Security)
- Computer Science & Engineering (IoT)
- Computer Science & Engineering
- Information and Technology
- Electronics & Communication Engineering
- Civil Engineering
- Biotechnology





SCOPE FOR ELECTRIC VEHICLE ENGINEERS

All the leading automobile vehicle manufacturers are venturing into environment friendly electric vehicles. The entire world is focusing its attention towards electric vehicles (EVs). The leading manufacturers of electrical vehicles in India are Ather, OLA, Tesla, Reep Industries, Ford, Mahindra & Mahindra etc.

A huge employment potential is awaiting for EV engineers. The global electric vehicles market is expected to register a compound annual growth rate (CAGR) of 40.7% from 2020 - 2027 according to Precedence Research (8th Jan 2020). EV industry is projected to create 10 Million jobs in future.

The Ministry of Skill Development and Entrepreneurship is in the process of preparing the program to provide adequate manpower to the electric mobility industry.

The strategy includes creating a skilled and trained workforce which has an expertise in design and testing, battery manufacturing and management, sales, services and infrastructure of electric vehicles (Business Today).

Overall employment of Electrical and Electronics Engineers is projected to grow by 7 percent from 2016 to 2026, about as fast as the average for all occupations. The need to upgrade the nation's Power Grids will also create demand for electrical engineering services.



AC & DC MACHINES LABORATORY



ELECTRONICS DEVICES & CIRCUITS
LABORATORY



UG SIMULATION LAB



DEPARTMENT LIBRARY



POWER ELECTRONICS LABORATORY



PRINTED CIRCUIT BOARD
LAB



2023
Engg:101-150
Univ: 151-200



SDG 4: 75 | SDG 6: 77
SDG 7: 101-200
SDG 17: 301-400



QS Asia University
Ranking 2024 (801+)



Diamond

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